DOCUMENT RESUME

ED 100 561 RC 008 251

AUTHOR	Byerlee, Derek
TITLE	Research on Migration in Africa: Past, Present, and Future, African Rural Employment Paper No. 2.
INSTITUTION	Michigan State Univ., East Lansing. Dept. of Agricultural Economics.
SPONS AGENCY	Agency for International Development (Dept. of State), Washington, D.C.
PUB DATE	Sep 72
NOTE	38p.
EDRS PRICE	MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS	Capital; Demography; Developing Nations; *Economic Development; Labor Market; *Literature Reviews; Methods; Migrants; *Migration Patterns; *Public Policy; *Research Needs; Rural Urban Differences; Socioeconomic Influences
IDENTIFIERS	*Africa; Rural Urban Migration

ABSTRACT

African nations have been experiencing rapid rates of urbanization accompanied by serious problems of urban unemployment due to the rate of rural-urban migration and the lack of an adequate understanding of the migration process for economic policy formulation. The aim of this paper was to review the present knowledge of African rural-urban migration, suggesting future directions for improved methodology and theory for economic research on migration. Focus was on: (1) Migrants (identity) and the Migrant Process; (2) Determinants of Rural-Urban Migration (noneconomic factors and income differentials); (3) Implications of Migration for Economic Development (distortions in factor markets, migration as capital transfer, and externalities associated with migration). The literature revealed that younger, better educated people have dominated rural-urban migration in Africa; economic motives have been important in determining the rate of rural-urban migration (little agreement as to the relevant economic variables in the decision to migrate); divergence between the private and social returns of migration (almost no research establishing the divergence magnitude). Future migration theory should include the human capital approach; methodology should utilize sample survey techniques, rather than unreliable census data, and migration research should be linked with policy concerning education, population distribution, industrial decentralization, and rural-urban labor markets. (JC)

BEST COPY AVAILABLE

AFRICAN RURAL EMPLOYMENT RESEARCH NETWORK

African Rural Employment Paper No. 2

RESEARCH ON MIGRATION IN AFRICA: PAST, PRESENT AND FUTURE

by

Derek Byerlee

Department of Agricultural Economics Michigan State University East Lansing, Michigan

1972

RC000251

0002

RECEIVED OCT 29 1974

BEST COPY AVAILABLE

THE AFRICAN RURAL EMPLOYMENT RESEARCH NETWORK

The African Rural Employment Research Network was initiated in 1971 by a group of scholars interested in comparative analysis of the development process in selected African countries with emphasis on rural employment problems. The research program has been jointly designed by scholars in African countries, at Michigan State University and at other universities in North America. Research emphasis is being directed to Sierra Leone, Nigeria and Ethiopia. In addition, individual scholars in other countries, such as Ghana, Zaire and Tanzania, are carrying out research on rural employment problems and are members of the Network.

The research program emphasizes joint and individual studies of rural employment such as the demand for labor in alternative production systems and in the rural nonfarm sector, the migration process as a link between rural and urban labor markets and the impact of macro-economic policies on labor absorption in agriculture. Attention will be directed to developing policy models to trace the consequences of alternative strategies of agricultural development on farm output, employment, income distribution and migration and to incorporating the employment objective into project, sub-sector and sectoral analysis in developing countries.

The Network maintains links with similar research networks in Latin America (ECIEL) and Asia (CAMS) and with organizations such as the FAO, ILO and the World Bank.

African Rural Employment Papers are distributed without charge to libraries, government officers and scholars.

Carl K. Eicher
Professor of Agricultural Economics
Michigan State University
East Lansing, Michigan 48824

PN-AAG-187

RESEARCH ON MIGRATION IN AFRICA:

PAST, PRESENT AND FUTURE

Derek Byerlee
Department of Agricultural Economics
Michigan State University

This paper has been developed as part of a three year study of rural employment problems in Africa which is being financed under an AID/Washington Contract (AID/csd 3625) with the Department of Agricultural Economics at Michigan State University.

September, 1972

0004

TABLE OF CONTENTS

Introduction

Migrants and the Migration Process

- Characteristics of Migrants
- The Process of Rural-Urban Migration

Determinants of Rural-Urban Migration

- The Rural-Urban Income Differential
- Noneconomic Factors in Migration

Implications of Migration for Economic Development

- Distortions in Factor Markets
- Migration as a Capital Transfer
- Externalities Associated with Migration

New Directions for Research

- Toward an Improved Theory
- Toward an Improved Methodology
- Integrating Migration Research and Policy Analysis

INTRODUCTION

Migration of human populations is generally recognized as an integral part of the process of socio-economic development. It ensures the mobility of labor and its associated human capital between regions and occupations. In a competitive economy, migration serves as an adjustment in factor markets to bring factor markets in different geographical areas into equilibrium. No generally accepted typology of migration flows exists, but for the purposes of this paper, contemporary African migration flows will be classified in temporal and spatial dimensions. In the temporal dimension, African migrations include a) seasonal migration, b) short-term migration for a period of two to five years and c) long-term or permanent migrations. Spatially, migrations may be rural to rural, rural to urban, urban to rural, or urban to urban.

The relative importance of each of these types of migration in Africa has varied historically. Seasonal migration between rural areas is important in areas of Africa with a pronounced dry season. For example, in the savannah region of West Africa, seasonal migrants leave home at the end of harvest to work in the tree crop zone of the south, returning again at the beginning of the next growing season.[1/]

Short-term migration between rural and urban areas has historically been important throughout Africa during the colonial period. Typically men migrated from their village for a period of two to five years to work in mines, plantations and factories, sometimes at considerable distances from their home area.

[1/] Beals and Menezes [1970] have analyzed the seasonal migration stream in Ghana. Using an inter-regional programming model they demonstrate the role of seasonal migration in augmenting incomes of farmers of the savannah zone in the dry season and overcoming peak labor demands in tree crop zones.

Often men would make such a trip several times during their lifetime giving rise to a "circular" pattern of migration.[2/] With increasing unemployment, the competition of a growing body of school leavers, and the closing of international boundaries, the short-term migrant has gradually phased into a permanent migrant who either has a wage job and will not risk giving it up to return to the village or who is self-employed in the urban small-scale sector in the hope of obtaining a wage job.[3/] Associated with this shift to permanent migration has been an increasing tendency for migrants to bring wives and family to town.

Largely because of the predominance attained by more permanent streams of rural to urban migrants in recent years, African nations are experiencing rapid rates of urbanization accompanied by serious problems of urban unemployment.[4/] There is a widespread concern that the rates of rural-urban migration should be slowed, but little agreement on appropriate policy measures. Part of this disagreement arises out of the lack of an adequate understanding of the migration process for economic policy formulation.

Until recently migration research in Africa has been almost exclusively the domain of anthropologists, sociologists and geographers. This research has yielded a large body of knowledge of the characteristics of migrants and the migration process, but little information on the economic factors affecting

---

[2/] This type of migration has probably been more important in Africa than other regions partly because of freedom to move across colonial boundaries and partly because the communal land tenure system allowed relative flexibility in leaving villages and returning again.

[3/] Circular streams of migration are still common in Southern Africa as for example, between Malawi and South Africa.

[4/] Urban growth rates in Africa are among the highest in the world. Frank [1971] from a sample of 23 cities estimates an average growth rate of 7 percent annually, with several cities having growth rates in excess of 10 percent.

migration. In particular, there is little knowledge of the effect on migration of the following: a) investment in education, b) urban minimum wage legislation, c) strategies to promote small-scale industries in rural and urban areas, d) increasing rural employment through increased working hours, increased labor force participation or increased productivity, e) increasing the information available in rural areas on urban employment opportunities and f) agricultural policies such as marketing board taxes. Even less research has been conducted on the implications of migration for economic development in both rural and urban areas.

It is the aim of this paper to critically review the present knowledge of African rural-urban migration and suggest future directions for improved theory and methodology for economic research on migration. The focus of the paper will be on reviewing the recent literature, (particularly since independence) on rural-urban migration from an economist's perspective. Earlier reviews by Elkan [1967], Gugler [1968, 1969], Panofsky [1963], and Hutton [1970b] have adequately covered the short-term labor migration characteristic of earlier periods.[5/]

MIGRANTS AND THE MIGRATION PROCESS

Characteristics of Migrants

Migration is a selective process in the sense that migrants generally have demographic, educational and economic characteristics which distinguish them from their population of origin. It is this selectivity which forms the basis for analyzing the determinants of migration. In Africa, our knowledge of the characteristics of migrants is dominated by the work of Caldwell [1969]

[5/] It is not the intention to discredit the importance of the other main types of migration, both seasonal and long-term. However, adequate treatment of this topic is beyond the scope of this paper.

who surveyed 14,000 persons in both rural and urban areas of Ghana. In addition, surveys by numerous other authors provide a good coverage of these characteristics in other parts of Africa.

Demographic Characteristics: Early studies of African migration have noted the high proportion of men in the rural-urban migration streams. In recent times, however, the proportion of women in the migration stream has increased and, in fact, Caldwell [1969] finds that women comprise almost half of rural-urban migrants in Ghana.[6/]

Invariably, the average African migrant is young. In Ghana, the highest propensity to migrate occurs in the 15-19 year age category [Caldwell 1969]. Rempel [1970] notes a peak for the 20-25 age group in Kenya while Callaway [1967] estimates that three quarters of the migrants to Ibadan are school leavers between 15 and 25 years of age. In fact, both Caldwell [1969] in Ghana and Ominde [1967] in Kenya find evidence that after the age of 45 the number of returning migrants exceeds the number of out-migrants from rural areas.

Educational Characteristics: Studies of rural to urban migrants consistently show a positive association between education and the propensity to migrate. The Ghanaian survey revealed that 65 percent of respondents with no education had never migrated or did not intend to migrate, compared to 17 percent for those respondents with some secondary schooling [Caldwell 1969]. Similar results are obtained by Rempel [1970] in Kenya. Sabot [1972] in Tanzania provides the most comprehensive analysis of the relationships between education and migration. Not only do Sabot's results reveal the higher propensity to migrate of educated persons but also that this selectivity has increased over time with secondary school leavers forming a higher proportion of total rural-urban migrants.

[6/] Thomas [1970] in a review of Latin American rural to urban migration reports that women are more important than men in rural-urban migration although he gives no apparent reason.

Economic Characteristics: Surprisingly little data exists on the income and wealth status of rural households from which migrants originate. Many authors have interpreted the high out-migration from densely populated regions to mean that migrants originate from poor households [Elkan 1960]. Significantly however, Caldwell [1969] finds that rural-urban migrants in Ghana tend to originate in households of above average wealth. Unfortunately, he was not able to isolate the effect of more wealthy households on education of household members and hence, the propensity to migrate. Alternatively, it is possible that the higher income may be the result of remittances of migrants from urban areas.

When migrants are classified by occupation prior to migration, over half are found to be school leavers without any previous occupation [Rempel 1970 and Callaway 1967]. The remainder are made up of farmers and self-employed craftsmen with the skill-level of craftsmen apparently having little effect on the propensity to migrate [Caldwell 1969].

The Process of Rural to Urban Migration

A large number of rural-urban migrants are school leavers who depart within a year after finishing school. Many have visited the city previously but their choice of destination is largely influenced by the presence of relatives and friends already in town [Caldwell 1969, Hutton 1970 and Rempel 1970]. Generally these relatives and friends will act as a source of support while searching for a job. In some cases these extended family relationships are being replaced by kin or tribe-based voluntary associations [Little 1965].

The rate of migration almost always declines with the distance of the urban area from the rural area of origin. There is evidence that many migrants follow a step migration pattern; first migrating to the nearest town and then

later to a larger urban area.[7/] However, the distance migrated generally increases with the level of education with the most educated migrants often being drawn to the capital city.

Largely because of the communal land tenure system, an African generally has claim to his land even when residing in the city. For this reason, a migrant will often retain close ties with his village through frequent visits and remittances of cash and gifts. Furthermore, the high rate of return migration after the age of 45,noted above, may mean that many migrants retire in their home area [Caldwell 1969]. Studies of rural-urban migration have not generally considered this reverse urban-rural flow. Probably many young migrants who fail to obtain a city job also return home, but the significance of this flow needs to be further researched.

DETERMINANTS OF RURAL-URBAN MIGRATION

Most studies of migration in Africa and other regions have concluded that economic motives are the primary determinant of the quantity and direction of migration flows.[8/] In Africa this conclusion has often been reached through responses to such questions as; "why did you migrate". The respondents have nearly always stressed economic motives such as higher incomes and better employment opportunities (e.g. Caldwell 1969). Although establishing economic factors rather than social factors as central to the migration decision, this approach is limited in explaining the direction and rates of migration flows and in isolating the relevant economic variables in the decision to migrate.

Other authors have tried to classify economic factors into "push" and "pull" factors. For example, Elkan [1960] has mentioned "push" factors

---

[7/] See, for example, Collins [1952] study in Sierra Leone and Gregory's [1971] study in Upper Volta.

[8/] For example, similar findings are reported in extensive reviews of Latin American migration studies by Thomas [1970] and U.S. rural-urban migration studies by McDonald [1971].

associated with high population densities as determining rural areas of out migration. Likewise high urban wage rates "pull" migrants to the city. These concepts are, of course, the equivalent of the familiar economic concepts of supply and demand but problems arise in their use when attempts are made to categorize determinants of migration as either push or pull factors without recognizing that both are important.

More recently with the interest of economists in migration, a few attempts have been made to quantitatively assess the impact of economic variables on migration in Africa. Beals, Levy and Moses [1967] using Ghanaian census data, regressed inter-regional migration on several variables such as per capita income, distance, education and urbanization for both the sending region and the receiving region. Their findings suggest that migration is positively elastic with respect to regional per capita income differentials and the degree of urbanization. However, education had a small but significant negative effect on migration which the authors were unable to explain.

Using similar techniques Mabogunje [1970] has analyzed inter-regional migration in Nigeria using the 1953 data. His findings suggest a negative effect of income differentials on migration and a positive effect of education. Likewise, Sabot [1971] attempted to analyze rural to urban migration in Tanzania using census data. The regression equations generally gave poor explanatory power although rural-urban differences in per capita income sometimes had a significant effect. Given the general inconclusiveness of these results, the highly aggregative nature of the data, and statistical problems in using regression techniques, great caution must be exercised in interpreting the important economic factors bearing on migration from analyses of African census data.

The Rural-Urban Income Differential

Part of the difficulty in studying economic factors affecting rural-urban migration arises from theoretical problems in measuring the relevant rural-urban income differential because of problems in a) measurement of the relevant rural income, b) measurement of the relevant urban income and c) comparing the two incomes.

Rural Incomes: Knight [1972] explores some of the problems in measuring rural incomes. He shows that the relevant measure of a migrant's opportunity cost varies according to a) the household income sharing behavior and b) the agrarian system. For example, Knight [1972] shows that whether the supply price of a potential migrant is his average or marginal productivity depends on whether the household or individual is the decison maker. Likewise, if a rural-urban migrant cannot rent or sell his land because of the communal land tenure system, his opportunity cost is the average rather than the marginal productivity of labor.

Urban Income: In urban areas, the measurement of the relevant income is complicated by the dual structure of the urban labor market. Because of institutional factors such as minimum wage legislation, workers in the large-scale or modern sector generally receive a wage rate higher than that dictated by market forces, while workersin the small-scale sector receive a competitively determined wage rate.[9/] Alternatively a worker may be unemployed. Todaro [1969] hypothesizes that the relevant urban income is the present value of expected earnings computed from the probabilities that a migrant will receive a job in the large-scale or small-scale sectors or remain unemployed. The probability of obtaining a job varies with the rate of unemployment. Todaro

---

9/ For a more rigorous definition of the small-scale and large-scale sectors, see Byerlee and Eicher [1972].

also considers future earnings in measuring incomes, since the probability of obtaining an urban job may vary with the time spent in the city.[10/] Johnson [1971] has refined the Todaro model to include the rate of urban job turnover and the rate of creation of new jobs as factors affecting the probability of obtaining a job.

Although the essential elements of the Todaro model of migration have been empirically tested in the U.S. and other developed countries, no rigorous testing of the model has been undertaken in Africa.[11/] Rempel [1970] conducted an extensive survey of urban migrants in Kenya as a specific test of the Todaro model. Although regression analysis of the data showed "no consistent evidence of the importance of a rural-urban expected income differential as an attractive force to urban centers" [Rempel 1970 p. 109], the study suffered serious weaknesses such as the exclusive emphasis on studying rural-urban migration only in the urban area. Sabot [1972] has assembled evidence from Tanzania that the educational composition of the rural-urban migration stream has adjusted to changing employment opportunities in urban areas,[12/] but this did not constitute a rigorous test of the expected income hypothesis. Finally, Levi [1971] has tested the Todaro model in Sierra Leone,but again, because of poor secondary data such as officially registered unemployed and use of per capita food production as a proxy for rural incomes, he does not provide an adequate test of the model.

[10/] Presumably the probability of obtaining an urban job increases with the time spent actively searching in the city, although there is no empirical evidence to support this.

[11/] See, for example, Bishop [1961] for evidence of the significance of expected returns from migration in the U.S. Likewise, Johnson [1971] finds the rate of growth of nonagricultural jobs and the rate of unemployment are significant determinants of out migration from agriculture. In addition, a recent study of Lee [1972] in Taiwan has shown a strong relationship between out migration from agriculture and job opportunities in urban areas.

[12/] For example, with the increased difficulty of primary school leavers obtaining an urban job, the proportion of primary school leavers in the migration stream has declined and the proportion of secondary school leavers increased.

Comparing Rural and Urban Incomes: Even if measures of rural and urban incomes are obtained, there are several difficulties in comparing the two. Firstly, because there are larger numbers of educated people in urban areas a comparison of average rural and urban incomes must adjust for the educational composition of the population. Second, the urban worker does not consume all his incomes since some is shared among the unemployed and remitted to rural areas. Third, there are various problems of conversion to real incomes where prices are higher but social amenities are more available in urban areas. Finally, the relevant variable is not the actual income differential but the differential perceived by potential migrants in rural areas. Lack of information on urban employment opportunities may be one reason for differences in actual and perceived incomes, but the formation of income expectations is likely to be a complex interaction of education, age and aspirations.

Despite these numerous problems in measuring rural-urban income differentials, economists have made such comparisons widely in Africa to show that there is a significant rural-urban income disparity and that it is probably widening (e.g. Lewis [1967], Frank [1971] and Eicher et. al. [1970]). Generally, secondary data on average rural incomes and urban minimum wages are used in these comparisons. Knight [1972] has made the most detailed comparison of rural and urban incomes using various sources from Ghana. His results vary considerably depending on the source of data used but the rural-urban income disparity he observes is not as wide as generally believed.

Noneconomic Factors in Migration

Although economic factors clearly are the most important motive in the decision to migrate, various noneconomic motives may also affect migration. Economists often recognize these factors under a category called the "psychic costs and benefits" but then conveniently ignore them. On the other hand, many

researchers include some economic factors under noneconomic factors in the decision to migrate.

In Africa the obviously high proportion of school leavers in the migration stream has led some observers to suggest that education was a factor leading to rejection of agricultural pursuits (e.g. Lewis [1967], Harbison [1967]). However, economic factors may explain the high incidence of educated migrants since Beals et. al. [1967], Todaro [1971a] and Sabot [1972] give evidence that returns to education are generally very low in rural areas compared with urban areas. Furthermore, Hutton [1970], Foster [1968] and McQueen[1969] find no prejudice of school leavers against agricultural work when sufficient economic incentives are provided.[13/]

Another"noneconomic" factor widely cited is the tendency to migrate to towns where relatives are already present. To the extent that relatives provide food and housing for new migrants searching for a job, this may also be regarded as an economic factor. However, the primary influence of urban relatives is likely to be in providing information on urban jobs. Furthermore the migration of many women and children may be in order to join their husbands in town rather than for economic motives.

The decline in migration as the distance between the sending and receiving area increases can be partly explained in terms of economic factors such as the additional costs of acquiring information and of moving. But it is likely that other factors,particularly the desire to remain close to home, are more important in explaining the decline in migration with distance [Beals, Levy and Moses 1967].

Noneconomic factors such as family ties, suspicion of city life, etc. may be important in explaining the large number of people who do not migrate. Economic

---

[13/] Not only has it been suggested that educated migrants reject agriculture, but are also attracted by excitement of the towns. Again, this "bright lights" theory of migration has generally been refuted by African studies.

incentives may be a necessary condition for migration but they will not be a sufficient condition [Mitchell 1959].

IMPLICATIONS OF MIGRATION FOR ECONOMIC DEVELOPMENT

Migration on the scale that exists in Africa today clearly is of great socio-economic importance. The sociological effects of migration have been variously reviewed by Gugler [1968], Gutkind [1969] and Kuper [1965]. It is sufficient for the purposes of this paper to note that urbanization in Sub-saharanAfrica is reshaping social and political relationships at a rapid pace. In the rural areas, the social implications are less well documented. However, the fact that migrants do retain ties with their home areas is likely to act as a catalyst for social change in rural areas. Counterbalancing this is the fact that a village experiencing high rates of out migration will be left with an older, poorly educated population less receptive to change.

In economic development, migration facilitates the mobility of labor and efficient allocation of labor over regions. As such, the process of economic growth will be accelerated by removal of restrictions on migration. Mabogunje [1970] argues for a land policy in Nigeria that will readily encourage the free flow of labor and colonization of new lands. Likewise Eicher et. al. [1970] also notes the need for removal of political and ethnic barriers to migration, particularly rural to rural migration.

The view that free movement of labor from rural to urban areas will maximize social welfare, is complicated by the existence of several factors in the African situation which have implications in formulation of a migration policy. These include a) distortions in the factor markets, b) the transfer of capital associated with migration and c) externalities associated with migration.

Distortions in Factor Markets

Economists have argued that various price distortions such as high urban wage rates and agricultural export taxes have artificially increased the rural-urban income gap resulting in a premature exodus from the land and high urban unemployment rates.[14/] Because of these distortions the private and social returns to migration are not equal and government action is required to reverse the effects.

Clearly a more adequate theory of migration is required before the implications of migration for rural and urban development and policy formulation can be explored. Given a theory of migration some of the welfare effects of migration can be derived. In particular, Harris and Todaro [1970] use the Todaro [1969] model of migration to show that as long as urban wage rates are set institutionally at a higher rate than dictated by market forces, urban unemployment will exist even in equilibrium. There will also be a loss in total output if the marginal productivity of labor in agriculture is positive. Harris and Todaro show that policies to decrease urban unemployment by increasing urban employment will be frustrated by the influx of new migrants from rural areas and government policies should, therefore, be directed toward increasing rural incomes. Moreover, the shadow wage rate in urban areas should recognize the loss of agricultural output resulting from induced migration.

While the Harris-Todaro model raises important questions about policies toward migration and urban unemployment, it suffers from several weaknesses. In particular, Byerlee [1971] shows that, within the assumptions of the model, an increase in agricultural output is likely to increase migration out of

[14/] See Idachaba [1972] for a theoretical and empirical analysis of the effects of agricultural marketing board taxes on labor use in agriculture.

agriculture since with the economy assumed closed, agriculture's terms of trade fall while the urban wage rate is institutionally fixed. Furthermore, the conclusions of the Harris and Todaro analysis are,of course, only as good as the migration model on which it is based.[15/] As noted above, there is little conclusive evidence on the elasticity of rural-urban migration with respect to wages and employment in the modern large-scale sector.

The Harris-Todaro model analyzes the possible welfare implications of migration resulting from only one price distortion--an institutionally determined wage rate. Brannon and Anschel [1970] note other market imperfections which may result in divergence of the private and social benefits of migration. First, a potential migrant lacks perfect information of urban labor markets. Furthermore, the unemployed migrant may depend on city relatives for support and to the extent that this reduces the savings of urban workers, the investible surplus is reduced. Finally, the price of food in urban areas may be increased by the additional demands of new migrants and the resulting inflation may further distort prices. The empirical relevance of these effects in Africa remains to be tested.

Migration as a Capital Transfer

The highly selective nature of rural-urban migration with respect to education indicates that migration involves not only a transfer of labor but also a considerable transfer of capital from rural to urban areas.[16/] Given that education represents a significant proportion of investment of rural

---

[15/] Byerlee [1971] has explored some of the dynamic effects of increased urban employment and wages on migration which are not considered in the Harris-Todaro model. In particular, increased urban employment and wages increase food consumption which partly offsets the influx of migrants.

[16/] That education is regarded as investment by rural people is demonstrated by Sabot [1972] who notes a 12 percent decline in primary school enrollment in Tanzania in response to growing unemployment of school leavers.

households, the currently high proportion of unemployed school leavers in urban areas may represent a misallocation of resources away from agricultural production.[17] Furthermore, because of the emphasis on education as a criterion for modern sector jobs, even of low skill requirements [Sabot 1972], the private returns to migration are likely to be higher than the social returns, resulting in overinvestment in education and further out migration from agriculture [Berry 1970].[18]

Countering the transfer of savings from agriculture through migration of educated youth, is the remittance of urban migrants to their home areas. This practice is widespread throughout Africa, but its magnitude is not known. Preliminary evidence from Kenya and Tanzania indicates that as much as 20 to 25 percent of urban incomes are remitted to rural areas.[19] In large part these remittances reflect the strong ties of migrants with their home area. By allowing them to maintain rights to land use and eventually to retire in the village the remittances are a form of social security [Gugler 1969]. Conceivably cash remittances could have significance for rural development if used as short-term working capital to hire labor at peak seasons or invested on a long-term basis in agriculture. On the other hand, remittances in the form of gifts of consumer goods will have little effect on the rural economy except as an important means of redistributing incomes from urban to rural areas.[20]

---

[17] See Berry and Soligo [1969] for a rigorous analysis of the welfare effects of the transfer of capital with migration.

[18] In contrast to urban areas, the returns to education in rural areas are generally very low because of the orientation of the education system toward urban occupations [Sabot 1972], Todaro [1971b].

[19] See Johnson and Whitelaw [1972] for preliminary estimates that 21 percent of the urban wage bill is remitted to rural areas in Kenya.

[20] Some of the capital flows noted here can also occur in reverse although probably less important. Thus, government employees such as teachers, nurses, etc. are often posted in rural areas leading to a possible urban-rural flow of educated persons. Likewise remittances of food from rural to urban households may sometimes be important in supporting urban migrants.

Externalities Arising from Migration

In assessing the implications of rural-urban migration, the most difficult factor to quantify are the externalities of migration; that is, costs which are not internalized in private costs. These include some tangible costs such as increased public services for roads, sanitation, etc. in urban areas and intangible costs such as pollution, crime and decline in the quality of life associated with rapid urbanization.[21/]

In rural areas of the U.S., Maddox [1960] notes there may be some costs associated with declining population such as increased per capita costs of public services and depreciation of fixed assets, although these are not as likely to be important in Africa where rural populations continue to increase even in areas of rapid out migration. However, migration could increase the income disparities in rural areas as may have occurred in the U.S. [Hathaway 1964].

Research to assess these social costs of migration has not been carried out in Africa and indeed there is little research in this direction in the U.S. Several countries are implementing population policies but only a few countries such as Kenya and Tanzania have considered planning of population distribution.

NEW DIRECTIONS FOR RESEARCH

The preceeding literature review has shown that younger, better educated people dominate the rural-urban migration stream in Africa. Economic motives appear to have been important in determining the rate of rural to urban migration but there is little agreement as the relevant economic variables in the decision to migrate. There is good reason to believe that in most African countries there is a divergence between the private and social returns to migration but there is almost no research to establish the magnitude of this divergence and to formulate an appropriate policy toward migration. Future research by economists

[21/] Externalities may also arise from social factors such as the support of migrants by relatives and friends which lower the private cost of migrating.

must be directed toward a) improving the theory of migration b) improving the methodology for studying migration in the African environment, and c) integrating the results of this migration research into meaningful policy analysis.

Towards Improved Theory

A few researchers, notably Todaro [1969] and Gugler [1969] have attempted to spell out a theory of migration to explain rural-urban migration in Africa. Gugler [1969] considers migration flows from a sociological perspective in formulating a theory of migration. Although he recognizes the dominance of economic motives, his central concern is to analyze how non-economic factors and economic factors interact in the decision of an individual to migrate. Furthermore, Gugler includes elements of the contemporary African situation, such as the strong urban-rural ties in his theory of migration. Todaro [1969], on the other hand, is concerned with the analysis of the economic behavior of a migrant under the conditions of high unemployment and high wage rates in African urban areas.

Most "African theories" of migration have ignored some important theoretical developments in the literature on U.S. migration which have potential relevance to the African situation. In particular, the introduction of the human capital approach in economic theory in the early 1960's gave a new direction to the explanation of migration in the U.S. Sjaastad [1962] first formalized the migration decision as an investment decision where potential migrants choose that alternative which maximizes the present value of his expected future income streams. This means that younger people are more likely to migrate since they have a longer time horizon in which to take advantage of the benefits of migration. Furthermore, educated people

are more likely to migrate since the returns to education are higher and the opportunity for further education and on-the-job training are greater in urban areas. These concepts have been successfully used to explain migration in the U.S. by Bowles [1970], Wertheimer [1970] and Diehl [1966] and in Taiwan by Speare [1971].

In Africa, the conceptualization of migration as an investment decision has potential value in explaining the migration of school leavers. The present literature generally fails to separate the effects of age and education on the decision of school leavers to migrate. However, difficulties inevitably arise in attempting to discount future income streams because of problems in choosing a discount rate and an appropriate time horizon, particularly the problem of risk.

In migration studies in both the developed and developing countries attitudes to risk have generally been ignored in migration theories. Todaro [1969] has emphasized the uncertain nature of urban incomes because of the probability that a migrant will be unemployed. A potential migrant may also be ignorant of possible urban opportunities, which may be a deterrent to migration for risk averse persons. However risk is not limited to urban incomes. In rural areas, too, potential migrants face uncertain future incomes because of variation in weather and prices.

Risk attitudes may be an important reason explaining the migration of school leavers. A school leaver migrates to the city with relatively low opportunity and travel costs and may be supported by relatives and friends in the city while searching for a job. Furthermore, a school leaver who is unsuccessful in the city is usually free to return to his village. Thus, he may have little to lose from migrating. In contrast, the cost for an established household head is likely to be considerably higher because of the need to transport and support a family. This analysis underscores the

need to develop improved theory that would explain not only rural to urban migration but also the reverse urban-rural migration flow. To date African research has been almost exclusively concerned with rural to urban migration.

Finally, a theory of migration should center on the decision making process of the migrant and the environment in which that decision is made. Because rural-urban migration decisions are made in rural areas it is logical to emphasize the alternatives faced by individuals in rural areas. A school leaver for example may be faced with the choice of working on the family farm (perhaps, acquiring a farm of his own later), working in or establishing rural nonfarm enterprises, migrating seasonally during the slack season or migrating to the city. An important factor in this decision will be the perceived income and employment opportunities in urban areas, although factors such as information flows and education which shape these perceptions are not well understood. The development of migration from this rural perspective would be a significant departure from emphasis on urban opportunities of other authors such as Todaro [1969] and Johnson [1971].

Toward Improved Methodology

Although developments in the theory of migration in the U.S. can be usefully modified to the African case, methodologies used for empirical study of migration in the U.S. are generally not applicable. Empirical studies of migration in the U.S. and other developed countries have been conducted almost exclusively using census and other official data. Although Beals et. al. [1967], Mabogunje [1970] and Sabot [1971] have attempted similar analyses of migration in Africa[22/], African census data is of limited

[22/] In Latin America, Schultz [1971] and Sahota [1969] have undertaken similar studies in Columbia and Brazil, respectively.

use for testing economic theory of migration for several reasons. First, the degree of accuracy of census data is variable. Thus, Mabogunje [1970] used the 1953 census of Nigeria rather than the disputed 1963 census. In particular, there are rarely two consecutive censuses of equal accuracy and coverage for analysis of migration flows over time. Second, African censuses often do not include information on income. Finally, census data is generally more appropriate for analysis of inter-regional rather than rural-urban migration.

Research on rural-urban migration in Africa must generate primary data through sample survey techniques. Much of the present knowledge of rural-urban migration in Africa has been contributed by extensive surveys by Caldwell [1969] in Ghana and Rempel [1970] in Kenya. Both surveys were deficient in measuring economic variables--Caldwell because he did not quantify incomes and Rempel because he excluded rural households.

Probably the best work that has been done in developing a methodology for studying migration in a developing country is the work of Speare [1971] in Taiwan. Speare interviewed both rural and urban households to obtain economic data. In addition he obtained data on rural people's perception of urban employment opportunities and the flow of job information from urban to rural areas. However, Speare had difficulty in obtaining useful estimates of incomes in rural and urban areas.

The type of methodology employed depends on the specific model to be tested, but in line with the argument developed above that studies of migration give more emphasis to the rural area of origin, it is suggested that initial data gathering efforts begin in rural areas. Because income data is usually difficult to obtain in one interview, integration of migration research with ongoing production economics or household expenditure surveys

would be a great advantage. Furthermore, questions directed at people's perception of urban opportunities should be included. Identification of absent household members or former village residents who have migrated in a given period of time (e.g. five years) will then enable follow-up studies to obtain realized incomes and occupations in urban areas. Special efforts to include return migrants in the rural survey would enable a greater understanding of the causes and magnitude of the reverse urban-rural migration. In this way opportunity costs of migrants in rural areas, realized incomes of migrants, and perceived incomes of potential migrants can be obtained. Furthermore, the variance of these incomes could be computed to assess the degree of risk involved in migration.[23/]

The type of survey outlined above would involve intensive interviewing of migrants, potential migrants and return migrants over time. A fundamental problem with this approach is obtaining a time period long enough to yield intertemporal data. In this regard a small intensive survey conducted over a period of several years is likely to be superior to a large national cross-sectional survey. Furthermore, a multidisciplinary approach involving both economists and other social scientists could be most useful in combining the concern of economists for policy analysis with, for example, the established skill of anthropologists in intensive field research.

Integrating Migration Research and Policy Analysis

Research on migration should not be conducted as an end in itself, but be integrated into policy analysis. Rural-urban migration is the basic

---

[23/] The African Rural Employment Study is planning a series of studies in several African countries based on this type of methodology. Mr. John Nabila, University of Ghana is currently conducting the first of these studies among the Fra-Fra of Ghana.

linkage between the rural and urban labor markets. Thus policies which impinge on the rural or urban labor market will also influence the rate and direction of migration. This effect on migration should be considered in policy analysis since it has been argued that the private and social costs of migration may diverge because of a) distortions and imperfections in the factor markets, b) capital transfers included in migration and c) externalities arising from migration. Each of these has significant implications for policy formulation. For example, with an institutionally fixed urban wage rate the elasticity of migration with respect to urban wage employment has far-reaching implications for shadow pricing of labor in urban areas [Harris and Todaro 1970] and consequently for project evaluation and location. Likewise other distortions in the factor markets in rural areas such as agricutural taxes, credit rationing and poor information on urban job opportunities may all act to increase the rate of rural-urban migration above that which is economically and socially desirable.

Because migration is selective with respect to education, research on migration needs to be linked with research on education for policy analysis. In particular, the low returns to education in rural areas which have been observed as a biproduct of migration research, has implications for the restructuring of the present educational system.

Finally, the externalities associated with rural-urban migration has implications for formulating of a policy toward population distribution and industrial decentralization. Given these social costs of urbanization it may be desirable to provide incentives to encourage the development of small-scale industry in rural areas and smaller urban areas. These long-run implications of rural-urban migration for population distribution are particularly important in African countries because of their relatively early stage of urbanization.

BIBLIOGRAPHY

Abt Associates, Inc. 1970 - The Causes of Rural to Urban Migration Among the Poor. Report sumitted to Office of Economic Opportunity, Washington, D.C.

Adams, Dale W. 1969 "Rural Migration and Agricultural Development in Columbia," Economic Development and Cultural Change, 17(4):527-540.

Addo, N. O.; Gaisie, S. K.; Benneh, G.; and Kpedekpo, G.M.K., eds. 1969 Symposium on Population and Socio-Economic Development in Ghana. Ghana Population Studies No. 2, Legon: The Demographic Unit, Department of Sociology, University of Ghana.

Addo, N. O. 1970 "Some Structural Aspects of Internal Migration in Southeastern Ghana: Their Implications for National Development Policies." Paper presented at the East African Conference on Social Science, Dar es Salaam. (Mimeographed)

Banton, Michael P. 1957 West African City: A Study of Tribal Life in Freetown. London: Oxford University Press.

Beals, Ralph E.; Levy, Mildred B.; and Moses, Leon N. 1967 "Rationality and Migration in Ghana," The Review of Economics and Statistics, 49(4):480-486.

Beals, Ralph E. and Menezes, Carmen F. 1970 "Migrant Labor and Agricultural Output in Ghana," Oxford Economic Papers, 21(1):109-127.

Berg, Elliot J. 1961 "Backward-Sloping Labor Supply Functions in Dual Economies: The Africa Case," Quarterly Journal of Economics, 75(3):468-492.

Berg, Elliot J. 1968 "Wage Structure in Less Developed Countries." Center for Research on Economic Development, Discussion Paper No. 1. Ann Arbor: University of Michigan.

Berg, Elliot J. 1970 "Wages and Employment in Less Developed Countries." Center for Research on Economic Development, Discussion Paper No. 13. Ann Arbor: University of Michigan.

Berry, R. Albert and Soligo, Ronald 1968 "Rural-Urban Migration, Agricultural Output and the Supply Price of Labour in a Labour-Surplus Economy," Oxford Economic Papers, 20(2):230-249.

Berry, R. Albert and Soligo, Ronald 1969 "Some Welfare Aspects of International Migration," Journal of Political Economy, 77(5):778-794.

Berry, Sara S. 1970 "The Marketing of Migrant Labour Services in African Countries: A Relatively Unexplored Topic," African Urban Notes, 5(3):144-153.

Bishop, C. E. 1961 "Economic Aspects of Changes in Farm Labor Force," Labor Mobility and Population in Agriculture. Ames, Iowa: Iowa State University Press.

Bondestam, Lars 1972 "The Population Situation in Ethiopia," Family Planning in Ethiopia, Ethiopian Nutrition Institute, Addis Ababa.

Bouvier, P. F. 1959 "Migrant Labor in Africa South of the Sahara: Some Aspects of Labor Migration in the Belgian Congo," Bulletin of Inter-African Labor Institute, 6(1):14-54.

Bowles, Samuel 1970 "Migration as Investment: Empirical Tests of the Human Investment Approach to Geographical Mobility," The Review of Economics and Statistics, 52(4):356-362.

Bradfield, Stillman 1965 "Some Occupational Aspects of Migration," Economic Development and Cultural Change, 14(1):61-70.

Brannon, Russel H. and Anschel, Kurt R. 1970 "A Re-evaluation of the Contribution of the Rural to Urban Labor Flow." Lexington: Department of Agricultural Economics, University of Kentucky. (Mimeographed)

Browning, Harley 1971 "Migrant Selectivity and the Growth of Large Cities in Developing Society," Rapid Population Growth: Consequences and Policy Implications. Edited by Roger Revelle, Baltimore: The Johns Hopkins Press.

Byerlee, Derek 1971 "Agricultural Development and Urban Unemployment: A Simulation Analysis of the Nigerian Economy." Unpublished Ph.D. dissertation, Oregon State University.

Byerlee, Derek and Eicher, Carl K. 1972 "Rural Employment, Migration and Economic Development: Theoretical Issues and Empirical Evidence from Africa." African Rural Employment Paper No. 1. East Lansing: Department of Agricultural Economics, Michigan State University.

Caldwell, John C. 1968 "Determinants of Rural-Urban Migration in Ghana," Population Study, 22(3):361-377.

Caldwell, John C. 1969 African Rural-Urban Migration. Canberra: Australian National University Press.

Callaway, A. 1963 "Unemployment and African School Leavers," Journal of Modern African Studies, 1(3):351-371.

Callaway, Archibald 1967 "Education Expansion and the Rise of Youth Unemployment," The City of Ibadan. Edited by P. C. Lloyd; A. L. Mabogunje and B. Awe. London: Cambridge University Press.

Clignet, Remi 1969 "Preliminary Notes on a Study of Unemployment in Modern African Urban Centers," Manpower and Unemployment Research in Africa, A Newsletter (Center for Developing Area Studies, McGill University, Montreal) 2(1):23-32.

Collins, G. R. 1952 "Movements of Population from Rural to Urban Areas in Sierra Leone With Special Reference to Economic Aspects and to the Colony Rural Areas," Record, International Institute of Differing Civilizations, 27:152-171.

Diehl, William D. 1966 "Farm-Nonfarm Migration in the Southeast: A Costs-Returns Analysis," Journal of Farm Economics, 48(1):1-11.

Diejomaoh, V. P. and Orimalade, W. A.T. 1971 "Unemployment in Nigeria: An Economic Analysis of Scope Trends and Policy Issues," The Nigerian Journal of Economic and Social Studies, 13(2):127-160.

Dorjahn, Vernon R. 1971 "The Effects of Labor Migration on Rural Liberia," Rural Africana, 15:51-65.

Eames, Edwin 1965 "Urbanization and Rural-Urban Migration in India," Population Review, 9(1):38-47.

Eicher, Carl; Zalla, Thomas; Kocher, James; and Winch, Fred 1970 Employment Generation in African Agriculture, Institute of International Agriculture, East Lansing: Michigan State University.

Elkan, Walter 1960 Migrants and Proletarians, London and New York: Oxford University Press.

Elkan, Walter 1967 "Circular Migration and the Growth of Towns in East Africa," International Labour Review, 96(6):581-589.

Elkan, Walter 1970 "Economists and African Towns," Manpower and Unemployment Research in Africa, A Newsletter, (Center for Developing Area Studies, McGill University, Montreal) 3(1):41-44.

Engmann, E.V.T. 1965 "Population Movements in Ghana," Bulletin of the Ghana Geography Association, 10(1):41-65.

Ewusi, Kodwo 1971 The Distribution of Monetary Incomes in Ghana, Institute of Statistical, Social and Economic Research, Legon: University of Ghana.

Fetter, Bruce 1968 "Elisabethville--Immigrants to Elisabethville: Their Origin and Aims," African Urban Notes, 3(2):17-38.

Fidel, N. Camille 1952 "Conditions et Niveaux de Vie dans Les Communautes Rurales et dans les Centres Urbans et Industriels de l'Afrique du Nord Francaise," Record, International Institute of Differing Civilizations, 27:137-151.

Flinn, William L. 1966 "Rural to Urban Migration: A Columbian Case," Land Tenure Center, Madison: University of Wisconsin.

Foster, Philip 1968 "Some Remarks on Education and Unemployment in Africa," Manpower and Unemployment Research in Africa: A Newsletter, (Center for Developing Area Studies, McGill University, Montreal) 1(2):19-20.

Frank, C. R. 1968 "Urban Unemployment and Economic Growth in Africa," Oxford Economic Papers, 20(2):250-274.

Frank, Charles R., Jr. 1971 "The Problem of Urban Unemployment in Africa," Employment and Unemployment Problems of the Near East and South Asia, Edited by Ronald G. Ridker and Harold Lubell. Delhi: Vikas Publications.

Geiser, Peter 1967 "Some Differential Factors Affecting Population Movement: The Nubian Case," Human Organization, 26(3):164-177.

Gessain, Monique 1967 Les Migrations des Coniagui et Bassari, Societe des Africanistes, Centre National de La Recherche Scientifique, Paris.

Ghai, Dharam P. 1970 "Employment Performance, Prospects and Policies in Kenya," East Africa Journal, 7(11):4-11.

Godfrey, E. M. 1969 "Labor-Surplus Models and Labor-Deficit Economics: The West African Case," Economic Development and Cultural Change, 7(3):389-391.

Gregory, Joel 1971 "Migration in Upper Volta," African Urban Notes, 6(1):44-52.

Grimshaw, Allen D. 1958 "Relationships Between Agricultural and Economic Indices and Rural Migration," Rural Sociology, 23:397-400.

Gugler, Josef 1968 "The Impact of Labor Migration on Society and Economy in Sub-Saharan Africa: Empirical Findings and Theoretical Considerations," African Social Research, No. 6:463-486.

Gugler, Josef 1969 "On the Theory of Rural-Urban Migration: The Case of Sub-Saharan Africa," Migration. Edited by J. A. Jackson. Cambridge: Cambridge University Press.

Gugler, Josef 1970 Urban Growth in Sub-Saharan Africa, Makerere Institute of Social Research, Kampala, Uganda.

Gutkind, P. C. W. 1967 "The Energy of Despair: Social Organizations of the Unemployed in Two African Cities: Lagos and Nairobi," Civilizations, 17(3):186-211

Gutkind, P.C. W. 1968 "African Responses to Urban Wage Employment," International Labour Review, 97(2):135-166.

Gutkind, P.C.W. 1969 "Tradition, Migration, Urbanization, Modernity and Unemployment in Africa: The Roots of Instability," Canadian Journal of African Studies, 3(2):343-366.

Hamilton, C. Horace 1956 "Population Pressure and Other Factors Affecting Net Rural-Urban Migration," Demographic Analysis. Edited by Otis D. Duncan and Joseph J. Spengler. Glencoe, Illinois: Free Press.

Hance, William A. 1970 Population, Migration and Urbanization in Africa. New York: Colombia University Press.

Harbison, F. H. 1967 "The Generation of Employment in Newly Developing Countries," Education, Employment and Rural Development. Edited by James R. Sheffield. Nairobi: East African Publishing House.

Harris, John and Mitchell, Frank 1970 "A Further Note on Labor Migration," Kyklos, 23(3):585-591.

Harris, John R. and Todaro, Michael P. 1968 "Urban Unemployment in East Africa: An Economic Analysis of Policy Alternatives," The East African Economic Review, 4(2):19-

Harris, John R. and Todaro, Michael P. 1970 "Migration, Unemployment and Development: A Two Sector Analysis," The American Economic Review, 60(1):126-142.

Harris, R. N. S. and Steer, E. F. 1968 "Demographic-Resource Push in Rural Migration: A Jamaican Case Study," Social and Economic Studies, 17(4):398-406.

Harvey, Milton 1968 "Implications of Migration to Freetown: A Study of the Relationship Between Migrants, Housing and Occupation," Civilizations (Br), 18(2):247-269

Harvey, Milton 1969 "Levels of Economic Development and Patterns of Internal Migration in Sierra Leone." Paper presented to the Seminar on Population Growth and Economic Development, University College, Nairobi. (Mimeographed)

Hathaway, Dale E. 1964 "Migration From Agriculture: The Historical Record and Its Meaning," Agriculture in Economic Development. Edited by Carl Eicher and Lawrence Witt. New York: McGraw-Hill.

Hauser, A. 1969 "L'Emploi et le Chômage à Dakar," Manpower and Unemployment Research in Africa, A Newsletter (Center for Developing Area Studies, McGill University, Montreal) 2(2):25-29.

Hilton, T. E. 1966 "Depopulation and Population Movement in the Upper Region of Ghana," Bulletin of the Ghana Geography Association, 11(1):27-47.

Houghton, D. Hobart 1960 "Men of Two Worlds, Some Aspects of Migratory Labor in South Africa," The South African Journal of Economics, 28(3):177-190.

Hutton, Caroline 1970a "How the Unemployed Survive in Town: Kampala and Jinja, Uganda," Manpower and Unemployment Research in Africa, A Newsletter, (Center for Developing Area Studies, McGill University, Montreal) 3(2):9-12.

Hutton, Caroline R. 1970b "Rates of Labour Migration," Nkanga 6: Urban Growth in Sub-Sahara Africa. Edited by Joseph Gugler. Kampala: Makerere University.

Idachaba, Francis 1972 "Marketing Board Taxation of Nigerian Agriculture: Some Implications." Unpublished Ph.D. dissertation. East Lansing: Michigan State University.

Imoagene, Stephen O. 1969 "Physiosocial Factors in Rural-Urban Migration," Nigerian Journal of Economic and Social Studies, 9(1):375-386.

International Labor Office. 1969 Employment Policy in Africa, Part I: Problems and Policies, Third African Regional Conference, Accra, Geneva: International Labour Office.

International Labor Office 1969 Rural Employment Problems in the United Arab Republic, Employment Research Papers, Geneva: International Labor Office.

Jackson, J. A. ed. 1969 Migration, Cambridge: Cambridge University Press.

Johnson, George E. 1971 "The Structure of Rural-Urban Migration Models," Eastern Africa Economic Review, 1(1):29-46.

Johnson, George and Whitelaw, W. E. 1972 "Urban-Rural Income Transfers in Kenya: An Estimated Remittance Function." Unpublished paper, Institute of Development Studies, University of Nairobi, Kenya.

Johnson, Marion 1964 "Migrants' Progress," Bulletin of the Ghana Geography Association, 9(2):4-25.

Johnson, Marion 1965 "Migrants' Progress Part II", Bulletin of the Ghana Geography Association, 10(1):13-40.

Jurgens, Hans W.; Tracey, Kenneth A. A.; and Mitchell, Peter K. 1966 "Internal Migration in Liberia," The Bulletin--The Journal of Sierra Leone Geographic Association, No. 10:39-59.

Kilby, Peter 1967 "Industrial Relations and Wage Determination: Failure of the Anglo-Saxon Model," The Journal of Developing Areas, 1(4):489-520.

Knight, J. B. 1972 "Rural-Urban Income Comparisons and Migration in Ghana," Bulletin of the Oxford University Institute of Economics and Statistics, 34(2):199-228.

Kuper, Hilda, ed. 1965 Urbanization and Migration in West Africa. Berkeley: University of California.

Le[illegible]t S. 1969 "A Theory of Migration," Migration. Edited by J. A. [illegible] Cambridge: Cambridge University Press.

[illegible]H. 1972 "Wage Differential, Labor Mobility and Employment in Taiwan [illegible]ure." Paper presented to the Sino-American Conference on Manpower in [illegible], Taipei.

[illegible]i, J. F. S. 1971 "Migration and Unemployment in Sierra Leone," Manpower [illegible]d Unemployment Research in Africa: A Newsletter, (Center for Developing Area Studies, McGill University, Montreal), 4(2):20-25.

Lewis, W. Arthur 1967 Reflections on Nigeria's Economic Growth, Development Centre, Organization for Economic Cooperation and Development, Paris.

Little, Kenneth 1965 West African Urbanization: A Study of Voluntary Associations in Social Change. Cambridge: Cambridge University Press.

Mabogunje, Akin 1970 "Migration Policy and Regional Development in Nigeria," The Nigerian Journal of Economic and Social Studies, 12(2):243-262.

Mabro, Robert 1967 "Industrial Growth, Agricultural Underemployment and the Lewis Model: The Egyptian Case, 1937 to 1965," The Journal of Development Studies,3(4):322-351.

MacDonald, Leatrice D. and MacDonald John S. 1968 "Motives and Objectives of Migration: Selective Migration and Preferences Toward Rural and Urban Life," Social and Economic Studies, 17(4):417-434.

McDonald, Stephen L. 1971 "Economic Factors in Farm Outmigration: A Survey and Evaluation of the Literature." Unpublished paper, Department of Economics, University of Texas at Austin.

McQueen, Albert J. 1969 "Unemployment and Future Orientation of Nigerian School Leavers," Canadian Journal of African Studies, 3(2):441-462.

Maddox, James G. 1960 "Private and Social Costs of the Movement of People Out of Agriculture," American Economic Review, 50(2):392-402.

Mahalingam, N. 1964 "India's Population Problem and Internal Migration," Population Review, 8(2):45-49.

Minami, Ryochin 1967 "Population Migration Away from Agriculture in Japan," Economic Development and Cultural Change, 15(2):183-201

Mitchell, J. Clyde 1959 "The Causes of Labor Migration," Bulletin of Inter-African Labor Institute, 6(1):13-46.

Moeller de Laddersons, M.A.J. 1952 "Attraction Exercee parles Centres Urbans et Industriels dans le Congo Belge," Record, International Institute of Differing Civilizations, 27:189-196.

Myers, George C. 1967 "Migration and Modernization: The Case of Puerto Rico, 1950-1960," Social and Economic Studies, 16(4):425-431.

Nelson, Joan N. 1969 Migrants, Urban Poverty, and Instability in Developing Nations, Occasional Papers No. 22, Center for International Affairs, Harvard University.

Okun, Bernard, and Richardson, Richard W. 1961 "Regional Income Inequality and Internal Population Migration," Economic Development and Cultural Change, 9(2):128-143.

Ominde, Simeon H. 1965 "Population Movement to the Main Urban Areas of Kenya," Cahiers d'Etudes Africaines (Paris), 5(4):593-617.

Ominde, Simeon H. 1968 "Internal Migration of the Economically Active Age Group in Kenya," Ost Africanische Studien. Edited by H. Berger. Im Setbstrerlag des Wirtschaft und Sozialgeographischen Instituts der Friedrich, Alexander Universitat.

Panofsky, Hans E. 1960 "Migrant Labor in Africa South of the Sahara: The Significance of Labour Migration for Economic Welfare of Ghana and the Voltaic Republic," Bulletin of the Inter-African Labor Institute, 7(4):31-44.

Panofsky, Hans E. 1963 "Migratory Labor in Africa--A Bibliographical Note," The Journal of Modern African Studies, 1(4):521-529.

Peil, Margaret 1968 "The Unemployment History of Ghanaian Factory Workers," Manpower and Unemployment Research in Africa, A Newsletter (Center for Developing Area Studies, McGill University, Montreal) 1(2):10-13.

Peil, Margaret 1970 "Ghanaian Middle School Leavers: A Follow-Up Study," Manpower and Unemployment Research in Africa, A Newsletter (Center for Developing Area Studies, McGill University, Montreal) 3(2):13-18.

Petersen, William 1966 "Urban Policies in Africa and Asia," Population Review, 10(1):24-35.

Piault, M. P. 1961 "Migrant Labor in Africa South of the Sahara: The Migration of Workers in West Africa," Bulletin of Inter-African Labor Institute, 8(1):98-110.

Pokrant, R. J. 1966 "Labor Migration and Urbanization: A Research Proposal," African Urban Notes, 1(1):15-18.

Pool, D. I. 1971 "The Development of Population Policies," The Journal of Modern African Studies, 9(1):91-105.

Prothero, R. Mansell, 1967 "Characteristics of Rural-Urban Migration and the Effects of Their Movements Upon the Composition of Population in Rural and Urban Areas in Sub-Saharan Africa," Proceedings of the World Population Conference, 1965, Vol. IV: Migration, Urbanization Economic Development. New York: United Nations.

Rado, E. R. 1967 "Manpower Planning in East Africa," East African Economic Review, 3(1):1-30.

Randall, Laura 1962 "Labor Migration and Mexican Economic Development," Social and Economic Studies, 11(1):73-81.

Rempel, Henry 1970 "Labor Migration into Urban Centers and Urban Unemployment in Kenya," Unpublished Ph.D. dissertation, Madison: University of Wisconsin.

Rempel, Henry 1971 "The Rural to Urban Migrant in Kenya," African Urban Notes, 6(1):53-72.

Reynolds, Lloyd 1969 "Economic Development with Surplus Labour: Some Complications," Oxford Economic Papers, 21(1):89-103.

Rourke, B. E. and Sakyi-Gyinae, S. K. 1971 "Agricultural and Urban Wage Rates in Ghana," Research Report No. 4, Department of Agricultural Economics and Farm Management, University of Ghana, Legon.

Roussel, Louis 1970 "Measuring Rural-Urban Drift in Developing Countries: A Suggested Method," International Labour Review, 101(3):229-246.

Sabot, R. H. 1971 "Urban Migration in Tanzania," Unpublished paper, Economic Research Bureau, University of Dar es Salaam.

Sabot, R. H. 1972 "Education, Income Distribution and Urban Migration in Tanzania," Unpublished paper, Economic Research Bureau, University of Dar es Salaam.

Sahota, Gian S. 1968 "An Economic Analysis of Internal Migration in Brazil," The Journal of Political Economy, 76(2):218-245.

Schapera, I. 1947 Migrant Labor and Tribal Life; A Study of Conditions in the Bechuanaland Protectorate. London: Oxford University Press.

Schmid, Lester 1967 "The Role of Migratory Labor in the Economic Development of Guatemala," Reprint No. 22, Land Tenure Center, University of Wisconsin, Madison.

Schultz, T. Paul 1969 Population Growth and Internal Migration in Colombia. Santa Monica, Calif.: The Rand Corporation.

Schultz, T. Paul 1971 "Rural-Urban Migration in Colombia," The Review of Economics and Statistics, 53(2):157-163.

Schwarz, Alf 1969 "Croissance Urbaine et Chômage à Kinshasa," Manpower and Unemployment Research in Africa, A Newsletter (Center for Developing Area Studies, McGill University, Montreal), 2(1):37-44.

Senior, Clarence 1962 "Migration as a Process and Migrants as a Person," Population Review, 6(1):30-41.

Singh, S. K. 1970 "Rural-Urban Wage Differential," Working Paper No. 70-14, Basic Research Center, International Bank for Reconstruction and Development, Washington, D.C.

Sjaarstad, Larry A. 1962 "The Costs and Returns of Human Migration," Journal of Political Economy, 70(1):80-93.

Southall, A. W. 1968 "The Pattern of Migration in Madagascar and Its Theoretical Implications," African Urban Notes, 3(1):14-22.

Speare, Alden, Jr. 1971 "A Cost-Benefit Model of Rural to Urban Migration in Taiwan," Population Studies, 25(1):117-130.

Spengler, J. J. 1969 "Population Movements and Problems in Sub-Saharan Africa," Economic Development for Africa South of the Sahara. Edited by E. A. G. Robinson, London: MacMillan and Company.

Stiglitz, J. E. 1969 "Rural-Urban Migration, Surplus Labour, and the Relationship Between Urban and Rural Wages," Eastern Africa Economic Review, 1(2):1-27.

Taber, Stephen R. 1968 "Economic Opportunity and Urban Orientation as Factors in Uganda Migration," Paper presented at the University Social Sciences Council Conference, University of East Africa, Makerere University College, Kampala.

Tachi, Minoru 1964 "Regional Income Disparity and Internal Migration of Population in Japan," Economic Development and Cultural Change, 12(2):186-204.

Thomas, Robert N. 1970 "Internal Migration in Latin America: Analysis of Recent Literature," Paper presented to the National Conference for Latin Americanist Geographers, Ball State University, Muncie, Indiana.

Thomlinson, Ralph 1962 "Methodological Needs in Migration Research," Population Review, 6(1):59-64.

Todaro, Michael P. 1968 "An Analysis of Industrialization, Employment and Unemployment in LDC's," Yale Economic Essays, 8(2):329-402.

Todaro, Michael P. 1969 "A Model of Labor Migration and Urban Unemployment in Less Developed Countries," The American Economic Review, 59(1):138-148.

Todaro, Michael P. 1971a "Education and Rural-Urban Migration: Theoretical Constructs and Empirical Evidence from Kenya," Paper presented at a Conference on Urban Unemployment in Africa, Institute for Development Studies, University of Sussex.

Todaro, Michael P. 1971b "Income Expectations, Rural-Urban Migration and Employment in Africa," International Labour Review, 104(5):387-414.

Trebous, Madeleine 1970 Migration and Development: Case of Algeria, Development Center, Paris: Organization for Economic Cooperation and Development.

Turnham, David 1970 The Employment Problem in Less Developed Countries; A Review of Evidence. Development Center, Paris: Organization for Economic Cooperation and Development.

United Nations 1967 World Population Conference, 1965, Vol. IV: Migration, Urbanization, Economic Development, New York: United Nations.

United Nations Department of Economic and Social Affairs 1970 Methods of Measuring Internal Migration. Population Studies No. 47, New York: United Nations.

Van Velsen, J. 1960 "Labor Migration as a Positive Factor in the Continuity of Tonga Tribal Society," Economic Development and Cultural Change, 8(3):265-279.

Wertheimer, Richard F. 1970 The Monetary Rewards of Migration Within the United States, Washington, D.C.: The Urban Institute.

BEST COPY AVAILABLE

AFRICAN RURAL EMPLOYMENT PAPERS

AREP No. 1	Derek Byerlee and Carl K. Eicher. "Rural Employment, Migration and Economic Development: Theoretical Issues and Empirical Evidence from Africa." 1972.
AREP No. 2	Derek Byerlee. "Research on Migration in Africa: Past, Present and Future." 1972.
AREP No. 3	Dunstan S. C. Spencer. "Micro-Level Farm Management and Production Economics Research Among Traditional African Farmers: Lessons from Sierra Leone." 1972.
AREP No. 4	D. W. Norman. "Economic Analysis of Agricultural Production and Labour Utilization Among the Hausa in the North of Nigeria." 1973.
AREP No. 5	Carl Liedholm. "Research on Employment in the Rural Nonfarm Sector in Africa." 1973.
AREP No. 6	Gordon Gemmill and Carl K. Eicher. "A Framework for Research on the Economics of Farm Mechanization in Developing Countries." 1973.
AREP No. 7	Francis Sulemanu Idachaba. "The Effects of Taxes and Subsidies on Land and Labour Utilization in Nigerian Agriculture." 1973.
AREP No. 8	D. W. Norman. "Methodology and Problems of Farm Management Investigations: Experiences from Northern Nigeria." 1973.
AREP No. 9	Derek Byerlee. "Indirect Employment and Income Distribution Effects of Agricultural Development Strategies: A Simulation Approach Applied to Nigeria." 1973.
AREP No. 10	Sunday M. Essang and Adewale F. Mabawonku. "Determinants and Impact of Rural-Urban Migration: A Case Study of Selected Communities in Western Nigeria." 1974.

Single copies of African Rural Employment Papers may be obtained free from the African Rural Employment Research Network, Department of Agricultural Economics, Michigan State University, East Lansing, Michigan 48824.